11) Publication number:

0 025 766

A3

(12)

EUROPEAN PATENT APPLICATION

21 Application number: 80401315.9

(22) Date of filing: 15.09.80

(5) Int. Cl.³: A 61 K 31/70 A 61 K 31/785

30 Priority: 17.09.79 US 76004 04.06.80 US 156295

Date of publication of application: 25.03.81 Bulletin 81 12

88 Date of deferred publication of search report: 31.03.82

Designated Contracting States:
 AT BE CH DE FR GB IT LI LU NL SE

7) Applicant: MERCK & CO. INC. 126, East Lincoln Avenue P.O. Box 2000 Rahway, New Jersey 07065(US)

(2) Inventor: Field, Kirk A. 376 Meadowbrook Road North Wales, M.R.1. Pennsylvania 19454(US)

(72) Inventor: Tytell, Alfred A. 113 Church Road Lansdale Pennsylvania 19446(US)

(72) Inventor: Lampson, George P. 2012 Keystone Road Hatfield Pennsylvania 19440(US)

(7) Representative: Corre, Jacques et al, Cabinet Regimbeau 26, Avenue Kléber F-75116 Paris(FR)

(S) Pharmaceutical composition comprising modified polyribolnosinic-polyribocytidylic acid, for induction of interferon in primates.

(poly I:C) with poly-L-lysine hydrobromide ([lysine.HBr]_n) having a defined molecular weight is prepared which is about 5-15 times as resistant to hydrolysis by pancreatic ribonuclease as the parent poly I:C. A pharmaceutical solution, containing a relatively high concentration of the complex, prepared as described, induces significant antiviral levels of serum interferon in monkeys under conditions in which poly I:C itself induces little or no interferon. An important feature of this invention is that the product is a soluble material requiring no special solubilizing agent, thereby facilitating the preparation of solutions having the desired concentration. The product will hereinafter be designated as poly I:C:poly-L-lysine.



EUROPEAN SEARCH REPORT

Application number

EP 80 40 1315

	DOCUMENTS CONS	CLASSIFICATION OF THE APPLICATION (Int. CI.)				
Category	Citation of document with ind passages	ication, where appropriate, of relevant	Relevant to claim	ATTENATION (INC.)		
	* Claims 1,2	654 (ROLAND MAES) ,6,7; column 3, line n 4, line 5 *	1-6	A 61 K 31/70 31/785		
	8, 11th April Columbus, Ohio M. TSUBOI et a poly-L-lysine	l.: "Interaction of and nucleic acids"	1–6			
	& J. MOL. BIOL 1966 * Abstract *	. 15(1), 256-267,		TECHNICAL FIELDS		
	ADSCRECT			A 61 K 31/73		
A	13, 31st March 104368s Columbus, Ohio I.A. BEKTEMIRO the properties	ACTS, vol. 92, no. 1980, page 57, no. W.S.A. V et al.: "Study of of modified poly-fferent molecular	1	31.785 45/02		
	<pre>& VOPR. VIRUSO 674 * Abstract *</pre>	L. 1979, (6), 671-		·		
				. CATEGORY OF		
A	3, 20th July 1 12103f Columbus, Ohio J.M. RICE et a poly-D-lysine	ACTS, vol. 73, no. 970, page 133, no. , U.S.A. l.: "Enhancement by of polyinosinic acid eron production in	1	X: particularly relevant A: technological background O. non-written disclosure P: intermediate document T. theory or principle under ying the invention E: conflicting application		
	& APPL. MICROB. 867-869	IOL. 1970, 19(5),		D: document cited in the application L: citation for other reasons		
	* Abstract *	/.		&: member of the same patent		
M	The present search report has been drawn up for all claims			family. Scorresponding document		
Place of se	Place of search The Hague Date of completion of the search The Hague 18-12-1981			RIJCKEBOSCH		
EPO Form	PO Form 1503.1 05.78					

0025766



EUROPEAN SEARCH REPORT

Application number

EP 80 40 1315

-2-

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. CL3)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	, , , ,
A	US - A - 4 024 222 (TS'O et al.) * Column 5, lines 49-54; column 8, line 46 - column 9, line 68; column 15, line 34 - column 17, line 35 *	1	
	••••• .		
			TECHNICAL FIELDS SEARCHED (Int. Cl. ²)
	•		
			·
:			